DOCUMENT RESUME

ED 152 981 CE 015 181

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TITLE Adult Vocational Teacher Competencies.
SPONS AGENCY Pennsylvania State Dept. of Education, Harrisburg. Bureau of Vocational and Technical Education.
BUREAU NO 61049-4
PUB DATE Apr 78
NOTE 54p.; Paper presented at the Adult Education Research Conference (San Antonio, Texas, April 5-7, 1978); For related documents see ED 150 281, ED 147 473 and CE 013 431 ; Contains occasional light type

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Adult Vocational Education; Data Collection; *Educational Needs; Inservice Teacher Education; Knowledge Level; *Needs Assessment; *Part Time Teachers; Program Improvement; Self Evaluation; State Surveys; *Teacher Attitudes; *Teaching Skills
IDENTIFIERS *Pennsylvania

ABSTRACT

As part of a larger study to investigate the backgrounds and professional inservice needs of part-time adult vocational teachers in Pennsylvania, research was conducted to identify and assess adult vocational teacher competencies. Following a literature review, a survey instrument was devised which listed thirty-four competencies (basically adopted from research done in 1975 by the Center for Vocational Education, Ohio State University) over the following areas: program planning, development, and evaluation; guidance; classroom management; and providing instruction to special groups. It was mailed to 4,141 teachers, 1,390 of whom completed and returned it. Respondents were asked to select one of five proficiency levels they felt adult vocational teachers should have in each competency area; then they were asked to indicate their own present proficiency level for each competency. Findings were grouped by vocational regions in the state. In most every competency area teachers rated their acquired proficiency level lower than the level desired. Comparisons were made between results for teachers in different employment categories (e.g., full-time teachers; part-time teachers employed full-time elsewhere). Competency areas identified as major elements of concern were these: providing special instruction or assistance to disadvantaged or handicapped students and to second language students; utilizing advisory committees; implementing and supervising activities of student vocational organizatons; and recognizing special characteristics of the adult learner. (The questionnaire and competency list with parallel data summary are appended.) (DTT)

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ED152981

A Research Paper Presented at the
1978 Adult Education Research Conference
San Antonio, Texas
April 5-7, 1978

ADULT VOCATIONAL TEACHER COMPETENCIES*

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*For complete study, refer to the following Pennsylvania State University Vocational-Technical Education Research Reports by F.M. Hole, S. Hill and C. Foust: Vol. 15, No. 2, Assessment of Inservice Needs of Part-time Adult Vocational Teachers in Pennsylvania, June, 1977; Vol. 15, No. 4, A Profile of Adult Vocational Teachers in Pennsylvania, June, 1977; Vol 15, No. 3, Final Report, Coordinated Inservice Activities for Part-time Adult Vocational Teachers in Pennsylvania, July 1977. Copies of the above may be secured from the ERIC Document Reproduction Service.

This research study was supported in part by an EPDA grant, Pennsylvania Bureau of Vocational Education, Project Number 61049-4.

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ADULT VOCATIONAL TEACHER COMPETENCIES

Dr. F. Marvin Hole

Chapter I

Introduction

Background of the Study

Part-time faculty have often been considered a neglected group in the educational setting. Conditions of their part-time employment, and variations in the student population often create barriers to improving the quality of adult vocational programs.

Vocational programs throughout Pennsylvania which are designed to reach adult learners differ in scope and purpose. Some adult vocational programs offer short-term courses designed to upgrade individuals' skills for employment or personal use; while others designed to prepare individuals for employment are usually of longer duration.

The part-time faculty employed to instruct adult vocational course offerings are faced with a diverse student population. The adult learner varys greatly in past experiences, abilities, and objectives for participants in an adult vocational program. Some adults are upgrading skills, others are entering programs with little or no background, and others may be competent in a closely related field and are developing additional skills or backgrounds.

The nature of part-time employment suggests that most faculty would have other outside interests and commitments that influence total effectiveness of the adult programs. The temporary nature of these positions make it difficult to recruit part-time instructors, provide support for improvement of instruction, and to maintain continuity in instructional programming. Teachers recruited from different sources have different inservice needs for improving instruction in adult vocational education. Regardless of the background of the recruited instructor, there are additional problems in maintaining, improving, and expanding the adult vocational programs.

Need for the Study

There have been few studies done on a comprehensive scale to determine the backgrounds of the part-time adult vocational instructors, and their needs and concerns for inservice education programs. Identifying specific

characteristics of part-time instructors is made additionally difficult in Pennsylvania because of the absence of certification requirements for part-time adult vocational teachers. Since there are no certification requirements for part-time adult vocational instructors, there is little incentive for these people to participate in pre- and inservice teacher education programs. Other factors which discourage participation in these activities are time, scheduling conflicts, and previous educational backgrounds.

Instruction is greatly enhanced by the use of andragogical concepts because of the diverse adult student population. Adult learners in part-time vocational programs require instruction prescribed to their special needs. The part-time teachers also have varying backgrounds of professional development. Thus, there was a need to investigate the backgrounds and professional inservice needs of part-time adult vocational teachers in Pennsylvania.

Delimitations

This study focused on the part-time adult vocational faculty in Pennsylvania. A segment of the population surveyed was teaching adult vocational full-time. Persons teaching secondary full-time and adult vocational part-time, working outside education full-time and teaching adult vocational part-time, teaching adult vocational part-time only, and those in administrative positions full-time and teaching adult vocational part-time were also surveyed. This study did not include faculty teaching elementary or secondary education exclusively. This study investigated inservice needs for part-time adult vocational teachers.

Statement of Problem

This study was designed to:

Ascertain the perceptions of part-time adult vocational teachers on their inservice needs.

Definition of Terms

Acquired Proficiency Level: The response of part-time adult vocational teachers on a five-point scale as to the present degree of competence maintained by the teacher him/herself in a competency area.

Adult Learner: Any person over the age of sixteen who has left the formal school setting and has returned to an educational activity.

Adult Vocational Education: Programs of vocational and technical training or retraining to prepare adults to enter the labor market or upgrade their skills; or for employed persons in the labor market

requiring training or retraining to achieve stability or advancement in employment, or for the purpose of increasing educational attainment (Pennsylvania Department of Education, 1977).

Andragogy: The art and science of helping adults learn (Knowles, 1970, p. 61).

Competency: The knowledge, skills, and attitudes required to perform a given task.

Competency Area: One of 34 identified areas of competence needed by adult vocational teachers to successfully perform in a learning situation.

Desired Proficiency Level: The response of part-time adult vocational teachers on a five-point scale as to the degree of competence needed by adult vocational teachers in a competency area.

Disadvantaged: A person who has a school recognized academic, socioeconomic, cultural, or other disadvantage, that makes it unlikely that the student will succeed in a vocational curriculum designed for persons without such disadvantages, and who for that reason requires a specially designed vocational curriculum and/or special group or individual pupil services outside of the standard curriculum (Pennsylvania Department of Education, 1977).

Handicapped: A person who has a school-recognized physical or mental condition that requires a specially designed vocational education curriculum or special services outside a regular vocational curriculum (Pennsylvania Department of Education, 1977).

Proficiency Unit: The difference between the individual's perception of the desired level of proficiency needed by adult vocational teachers and the individual's acquired level of proficiency in a competency area.

Special Needs: Any person who because of a handicap or disadvantagement requires special services outside the regular vocational program in order to succeed.

Subject Matter Areas: General areas of study in vocational education including agriculture, distributive education, health occupations education, useful and gainful home economics, business, trade and industry, and technical.

Chapter II

Review of Related Literature

The intent of this review of related literature is to summarize and examine comparable studies in the identification of competencies appropriate to the teaching of adults and the assessment of inservice needs for part-time adult vocational teachers.

Adult Education

Studies were reviewed that dealt with various processes of competency identification for adult education teachers. Fenn (1972) identified 34 professional competencies appropriate to Adult Basic Education teachers. These competencies were ascertained by responses of teachers, students, county administrators, state department of education personnel, and teacher educators in adult education. The competencies identified in this study were not comprehensive in relation to adult vocational education, but provided competency areas unique to adult basic education teachers. The 34 competency areas were relevant to vocational education and provided an adult education perspective for working with unemployed, underemployed, and/or educationally disadvantaged adult learners.

The adult basic education student population is a potential source of recruitment into adult vocational programs. Many of these adult learners have entered vocational programs, thereby increasing the importance of competence in working with this student client.

Mocker (1974) identified competencies relating to the teaching of adults. The report identifies the need for teachers to be able to work with adults with a wide range of interests and abilities. Individualized instruction was identified in both the Fenn (1972) and Mocker (1974) studies, as a method for dealing with the diverse student population.

Part-time Community College Instructors

Studies related to part-time faculty at the community college provided both substantive and procedural assistance in the development of this project. The clientele of the community college is representative of some adult participants in vocational programs, as some states house adult vocational programs in the community college. Therefore competencies identified for community college instructors are closely related to competencies needed by adult vocational teachers in Pennsylvania.

In a Technical Report developed by Oregon State University, Division of Vocational, Adult and Community College Education (1971) common professional education competencies of community college vocational instructors were determined. This process of competency identification and ranking was done in four western states representing eight subject matter areas. Instructors were asked to evaluate 99 professional education competencies to denote the level of proficiency they felt was necessary in relation to their jobs as community college vocational instructors. The competencies were assigned a proficiency level based on a five point likert type scale. The competencies were then ranked and clustered for purposes of inclusion in teacher education curriculum.

The conclusions of the Oregon State University Study showed that:

1) Community college instructors of vocational education subjects resemble one another with regard to the 99 competencies.

2) Clusters of competencies can be generated for the curriculum through factor analysis procedures.

3) Community Colleges are very much alike in the instructor characteristice measured (Oregon State University, 1971).

Two important implications resulted from this study. The high degree of commonality demonstrated by the responses to the competencies studied should cause teacher educators to examine course proliferation caused by separate departments within vocational teacher education. The competencies identified could provide a source of performance based curricula to be incorporated into comprehensive teacher education programs.

A second major consideration based on this study was that those competencies with high mean scores should be included in vocational teacher education programs. Those that were ranked lower should be reviewed to determine the extent to which they are included in existing programs.

The competencies that were ranked the highest in terms of level of necessary proficiency were instructional management and teaching and guidance strategies. The areas that received the lower rankings were history and philosophy of vocational education, and legal aspects of education.

Adult Education in Agriculture

Vocational agriculture has included adult education in many teacher education programs. The professional education competencies and teacher education needs in vocational agriculture are relevant to the programming of inservice activities for all part-time adult vocational teachers. Morris (1956) identified 154 essential teaching competencies from the professional literature. Vocational agriculture teachers then ranked each competency on its degree of importance and development. In this study some of the competencies in the area of community and public relations ranked higher in importance than those competencies relating to the area of planning and organizing teaching activities.

A similar study by Reed (1970) focused on identified problem areas and implications for teacher education. The purpose of the study was to survey beginning teachers about their major concerns in the initial teaching situation. The major areas of concern were classroom teaching techniques, farm mechanics, advising FFA, and public relations. Reed recommended the problem areas be used as feedback to teacher education programs for program adjustment.

The appraisal of Pennsylvania's agriculture programs for adults, Witmer (1972), determined that 81 percent of the secondary schools surveyed had programs in operation less than fifteen years. The study showed that the scope of the programs surveyed fell about 20 percent below national averages. The major reason given for not initiating programs was the full-time teaching load of available teachers. The findings of this study are important indicators in the need for pre- and inservice activities for teaching adults in Pennsylvania.

Trade and Industrial and Technical Education

Studies have been done to determine the inservice needs of Trade and Industrial, and Technical teachers. The studies identified the competencies relevant to teaching adults and problem areas in the trade and industrial and technical areas. These studies were examined for perspectives on pre- and inservice needs of teachers in those areas.

Chambliss (1967) used 60 rudiments on a questionnaire to determine the inservice needs of Trade and Technical teachers. Each teacher responded to the degree of improvement needed for each rudiment. The teacher then responded to the preferred assistance from four choices. The assistance possibilities included were: 1) administrative leadership, 2) supervision, 3) instruction, and 4) clerical. The perceptions of administrators and related subjects instructors were also included in the study. The needs found to be common to the three groups were in the areas of participation in professional organizations, reading professional journals, and instruction in trade and technical education. The recommendations of this study included the ongoing inservice activities through seminars and institutes and the use of consultants to provide professional assistance.

Holmen (1970) determined the major professional problems of trade and technical teachers in Iowa as ascertained by themselves and their supervisors. The major problems included:

1) selecting texts, references, and related reading material,

2) allocating time to each unit,

3) planning and presenting related materials, and

4) preparing tests.

The main causes of the problem areas were identified as being inadequate time and inadequate educational preparation.

Holmen (1970) also collected demographic data on the surveyed population and found that the teachers had little formal education preparation and much trade experience. It was found that one-third had no education beyond high school and less than one-fifth had college degrees. Thirty-five percent had 20 years or more experience in the trade area. Holmen, therefore, suggested a major need for pre- and inservice education to assist the trade and technical teacher in the transition from industry to teaching.

Spaulding (1971) examined the effectiveness of instruction based on a profile of the vocational teacher. Achievement tests were used to measure student gain. Students' achievement tests scores were then analyzed in relation with the profile of the teacher. A characteristic of teachers whose students made the greatest gains on the achievement tests were high school graduates but did not hold a college degree. Another characteristic was participation in educational preparatory

courses. The profile also included the teacher who read five publications regularly. The number of years experience in the trade area was not found to be significant.

Problems of the part-time adult trade and technical teachers were studied in Michigan Community Colleges by Schmitt (1971). This study analyzed the problems of the part-time teacher as perceived by supervisors, teachers themselves, and adult students. The supervisors' perceptions of problem areas included the methods of selecting and organizing class material, evaluating students, selecting and using teaching aids and related materials.

The teachers perceived their major professional problems to be

lack of materials such as course outlines,
self-evaluation measures,
adapting instruction to individual differences, and
determining exit competencies for the vocational program.

Baldus (1974) identified professional teaching competencies of part-time adult vocational teachers as perceived by supervisors and the teachers themselves. The supervisors ranked teaching techniques, planning and organizing instructional materials, and using audio-visual devices as the areas of greatest need. The teachers ranked the same competency areas as areas of greatest inservice need. Both groups perceived a need for professional preparation in these areas.

Each trade area is not unique in its need for pre- and inservice activities for teachers. The perceptions of relevant competency areas are quite similar regardless of the occupational area. The studies reviewed showed little difference in inservice needs in relation to a specific occupational area.

Center for Vocational Education--Ohio State University

The Center for Vocational Education at the Ohio State University developed a program of performance based teacher education in 1975. This process resulted in the identification of common competencies needed by teachers in seven subject areas.

The first phase of the Center's project was to establish a research base essential competencies needed by secondary and/or postsecondary teachers. Approximately 1000 vocational teachers, supervisors, and teacher educators were involved in the identification and verification of 384 competencies essential for vocational teachers. These 384 competencies were then categorized into ten major competency areas. The competencies were used to develop instructional objectives for the 100 modules developed for use in vocational teacher education programs. The refinement of the identified competencies provided the basis for a standardized sequence of competencies for vocational teachers in the major content areas. The feedback received after more extensive use of the center's materials may result in further revision of the identified competencies.

The competencies included in the Center's project were applicalbe to secondary and postsecondary adult vocational teachers. There was no distinction made between content areas or student clientele. The research base does provide the essential elements of vocational teaching but is not inclusive of competencies essential for effectively teaching the adult learner.

Summary

Survey instruments, as well as the results of selected studies were reviewed prior to the development of the survey instrument used in this study. Related literature revealed no comprehensive listing of competencies relevant to adult vocational teachers in all subject matter areas. Needs assessment studies from various vocational subject areas, adult education and community college programs were examined.

Research in identifying adult basic education teacher competencies provided a basis for including competency areas in working with adults. The competencies common to part-time vocational community college teachers were relevant to part-time adult vocational education in Pennsylvania. Agriculture education contributed much in the area of identifying adult teaching competencies and major problem areas encountered in the initial teaching situation.

The professional competencies for adult agriculture, trade and industrial, and technical teachers identified in the literature are adaptable in teacher education programs of all subject areas. Competencies necessary for community college vocational teachers, as well as the competencies identified by the Center for Vocational education at Ohio State University are also common to the vocational areas.

The examination of related literature facilitated the selection and adaptation of competencies relevant to adult vocational education in Pennsylvania. The selected competencies provided a research base for pre- and inservice needs assessment of part-time adult vocational teachers in Pennsylvania.

Chapter III

Procedures

The Survey Instrument. The final form of the survey instrument contained 95 items, sub-divided into three parts: demographic data, data on inservice needs, and data on preferences for inservice activities. Only Part II of the survey instrument is presented in this study.

Part II of the survey instrument was designed to identify the inservice needs of adult vocational teachers. To achieve this goal, a list of 34 competencies, of special significance to adult vocational teachers, was developed. The list of competencies were basically adopted from research conducted in 1975, by Performance Based Curricula Program, The Center for Vocational Education, at The Ohio State University. To

address the adult competency component, two other studies were utilized: "Professional Education Competencies of Community College Instructors" developed by the Division of Vocational, Adult, and Community College Education at Oregon State University (1971); and "A Report on the Identification, Classification and Ranking of Competencies Appropriate for Adult Basic Education Teachers' by Donald W. Mocker in 1974.

Competencies were developed that dealt with program planning, development, and evaluation; curriculum development; guidance; classroom management; and providing instruction to special groups. Respondents were asked to select a proficiency level they felt adult vocational teachers should have in each competency area.

They were then asked to mark their present proficiency level for each of the competencies. To assess the inservice needs of adult vocational teachers, a comparison was made between the desired and acquired proficiency levels marked by the respondents; yielding proficiency units. A proficiency unit was defined as the difference between the individual's perception of the desired level of proficiency needed by adult vocational teachers, and the individual's acquired level of proficiency, in a competency area. This difference score was computed by assigning a numerical value to each of the possible response categories: "no" = 1, "slight" = 2, "moderate" = 3, "considerable" = 4 and "complete" = 5. The difference was computed for every individual in each of the 34 competency areas. The number of proficiency units needed for all adult vocational teachers in each region were summed, to give a regional total for each competency area. Inservice activities were planned for teachers in the Central region, on the basis of these determined needs.

Coded Identifier. The upper right hand corner of the first page of the survey instrument contained a five digit coding system. The first four numbers identified the individual teacher; while the last number identified the vocational region. The coding system was designed to enable a follow-up request for the return of the survey instrument for those teachers not responding to the first request. This coded key was destroyed after the follow-up mailing to assure individuals anonymity. The responses of adult vocational teachers were grouped with other teachers within the same region for the final data analysis.

Data Collection

Contact with participants was made by mail in November 1977. Each adult vocational teacher was sent:

1) a cover letter describing the study;

2) a three part survey instrument;

3) a self-addressed prepaid return envelope.

As returns were received, they were recorded. To increase the rate of

return, a follow-up letter was sent to adult vocational teachers in late November. Returns were accepted until mid January 1977. A total of 1660 returns were received. Table 3.1 illustrates the information concerning those returns. To achieve accuracy in the survey results, the survey instruments were grouped according to regions. Data were coded and punched onto IBM cards for processing.

Statistical Analysis of the Data

The data were processed at the Computation Center of The Pennsylvania State University using the program "Statistical Package for the Social Sciences" (SPSS, 1976). Two sub-programs were used to obtain the necessary information. Sub-program "frequencies" was used to obtain the frequency and percentage of responses to each of the 96 variables. The mean scores on specified variables were also obtained using the sub-program "frequencies." The sub-program "cross-tabs" was used on specified variables to identify how responses on one variable related to responses of the same individuals on a second variable.

Table 3.1

Sample and Response of
Adult Vocational Teachers to the Survey Instrument

Questionnaires	Number	% of Total
Sent	4141	100.00
Returned--completed	1390	33.57
Returned--not currently teaching adult classes	114	2.75
Returned--undeliverable	113	2.73
Returned--unanswered	3	.07
Returned--completed after cut-off date	40	.96

Figure 3.1 illustrates the plan of action followed throughout the study.

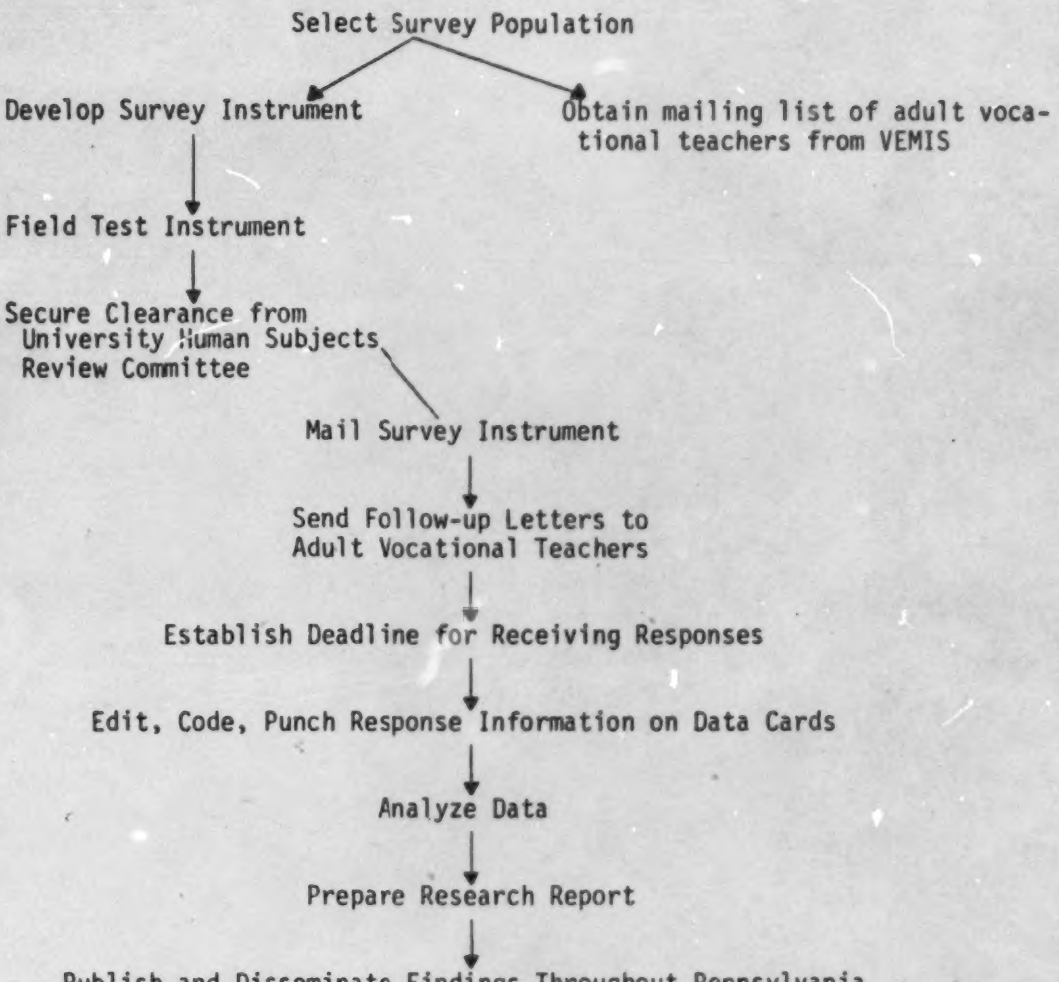
Select Survey Population
Develop Survey Instrument
Obtain mailing list of adult vocational teachers from VEMIS
Field Test Instrument
Secure Clearance from University Human Subjects Review Committee
Mail Survey Instrument
Send Follow-up Letters to Adult Vocational Teachers
Establish Deadline for Receiving Responses
Edit, Code, Punch Response Information on Data Cards
Analyze Data
Prepare Research Report
Publish and Disseminate Findings Throughout Pennsylvania

Figure 3.1. Flow diagram for Inservice Needs Assessment of Part-Time Adult Vocational Teachers in the Central Region of Pennsylvania.

Chapter IV

Findings

Inservice Needs

The survey questionnaire was designed to determine the inservice needs of adult vocational teachers in various competency areas. For each competency area, respondents indicated the level of proficiency needed by adult vocational teachers, and the level of proficiency they personally had acquired. Proficiency level choices were given as follows: "no" = 1, "slight" = 2, "moderate" = 3, "considerable" = 4, and "complete" = 5.

Average Regional Proficiency Scores. Figures 4.4, 4.5, and 4.6 summarize the mean scores of respondents to both the level of proficiency needed, and the level of proficiency acquired by adult vocational teachers, for each competency area. The competencies are numbered in the order in which they appear on the survey instrument (see Appendix A). The figures illustrate a direct correlation between the proficiency level needed and the proficiency level acquired in the competencies with the two highest mean scores, competency numbers 19 and 16. Respondents from each of the three regions indicated that adult vocational teachers should be most proficient in competency number 19: "maintaining occupational safety and health standards in the lab or shop." The mean acquired proficiency score in that competency area indicated adult vocational teachers were most proficient in "maintaining occupational safety and health standards in the lab or shop."

Adult vocational teachers in all three regions expected themselves to be quite proficient in competency number 16: "providing practical shop or laboratory demonstrations"; and were found to be quite proficient in that area.

The mean scores charted in Figures 4.4, 4.5 and 4.6 illustrate a discrepancy in the types of competencies which adult vocational teachers desired proficiency in, and those which they actually had acquired proficiency. Teachers in the Western and Eastern regions indicated the level of proficiency needed by adult vocational teachers to be lowest in competency number 29: "using counseling techniques to help students solve personal problems." Adult vocational teachers in the Central region, however, indicated little need for teachers to be proficient in competency number 30: "guiding students in the use of community agencies and services." Teachers throughout the state perceived little need for adult vocational teachers to be proficient in competency number 32: "providing special instruction or assistance to second language students."

The mean acquired proficiency scores, charted in Figures 4.4, 4.5, and 4.6, indicate that adult vocational teachers in the Central region perceived themselves as having the least proficiency in competency number 32: "providing special instruction or assistance to second language students." Adult vocational teachers in the Western and Eastern

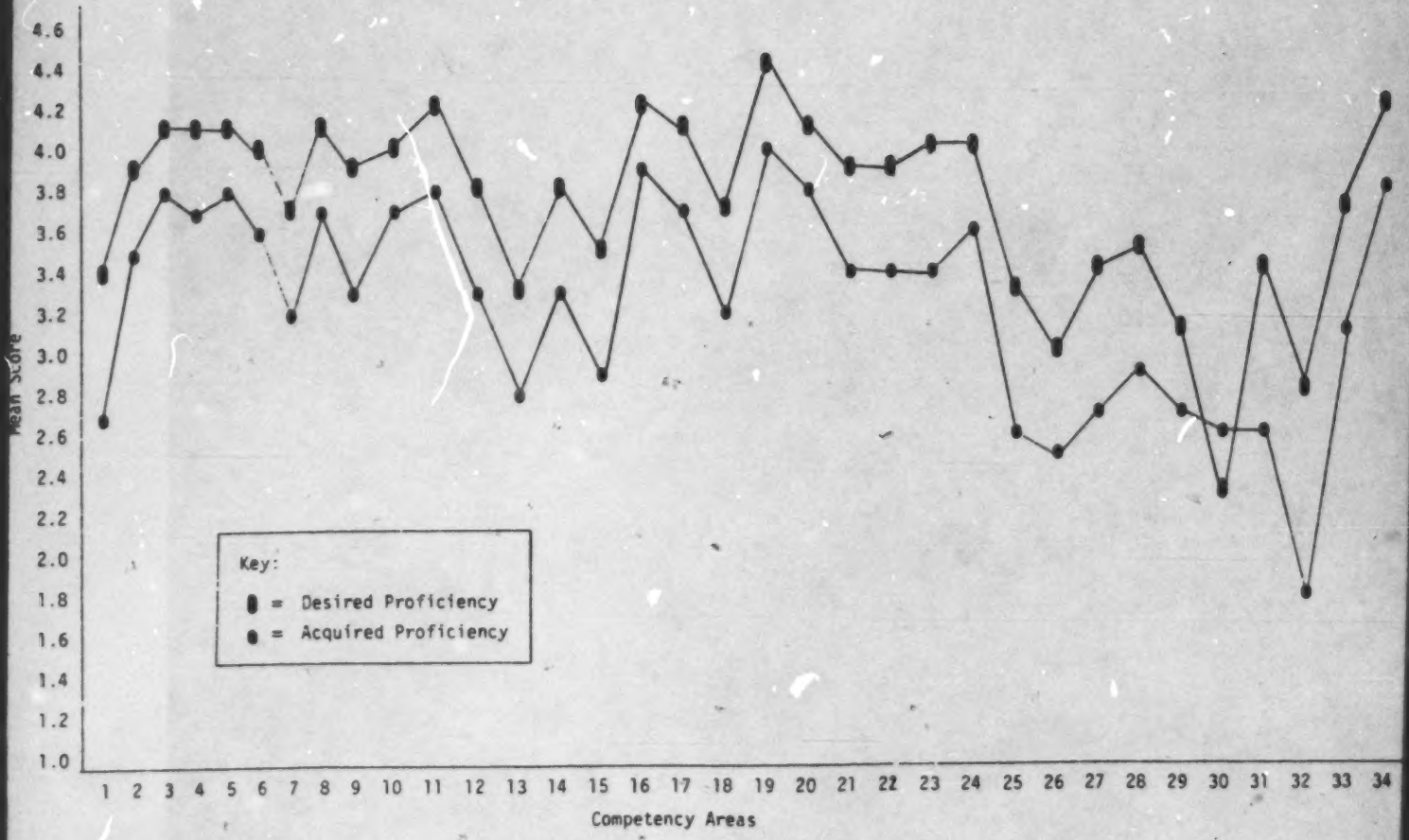

Figure 4.4. A Comparison of Mean Desired and Mean Acquired Proficiency Scores of Adult Vocational Teachers in the Central Region.

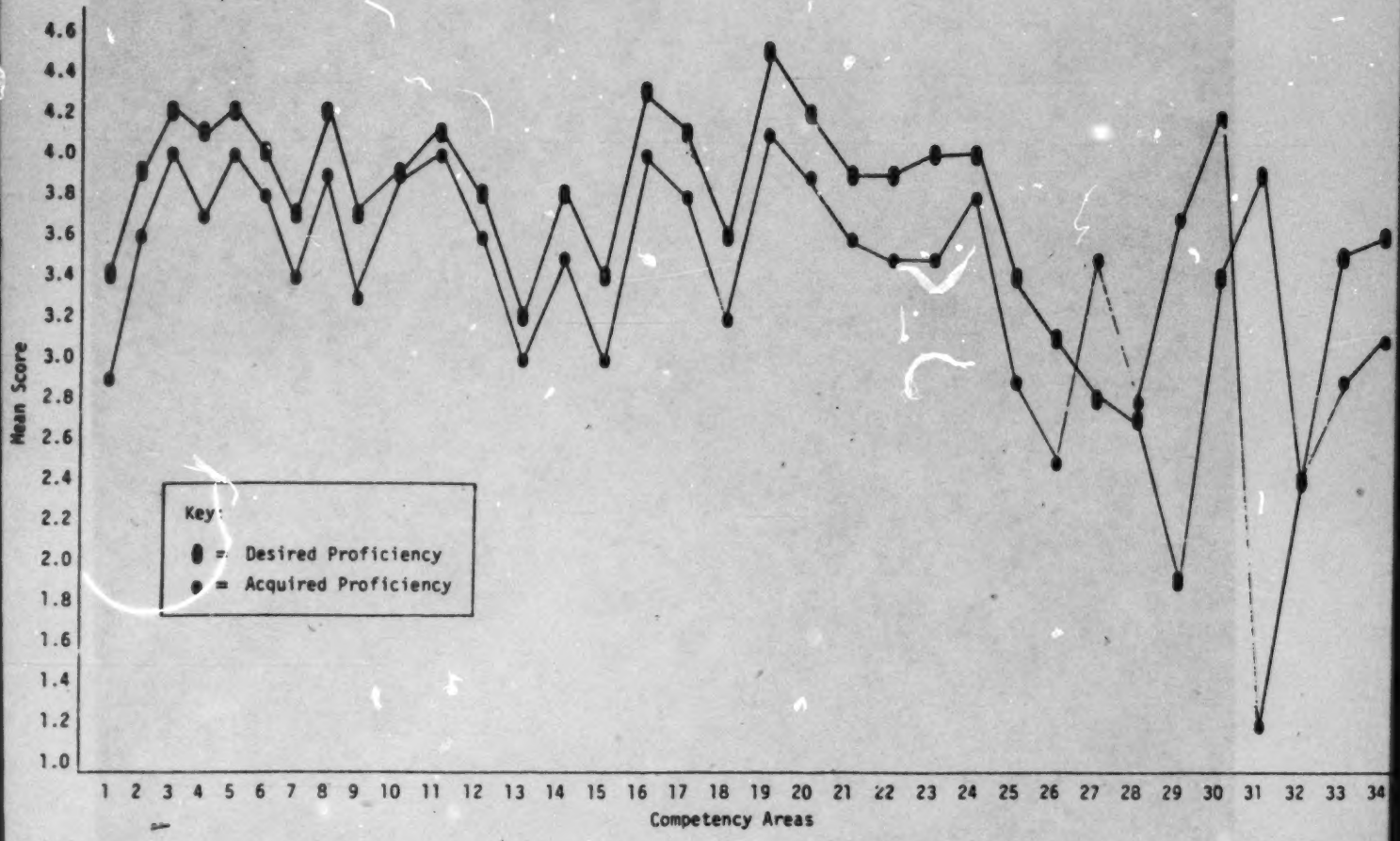

Figure 4.5. A Comparison of Mean Desired and Mean Acquired Proficiency Scores of Adult Vocational Teachers in the Western Regi

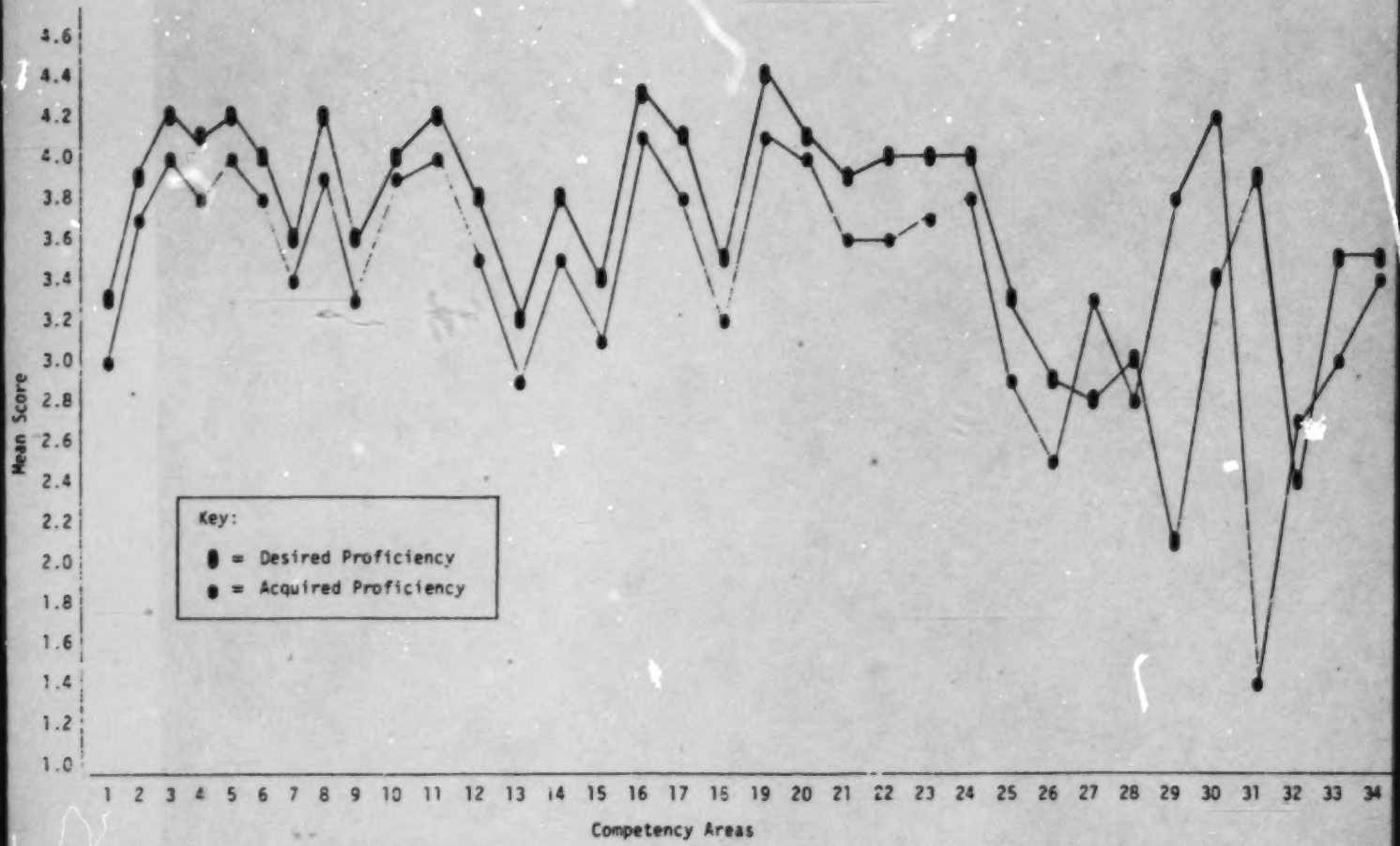

Figure 4.6. A Comparison of Mean Desired and Mean Acquired Proficiency Scores of Adult Vocational Teachers in the Eastern Region.

regions perceived themselves as being least proficient in competency number 31: "providing special instruction or assistance to disadvantaged or handicapped students." Other competencies which adult vocational teachers perceived themselves as being less proficient in include competency number 26: "implementing and supervising activities of student vocational organizations; competency number 28: "providing information on continuing education"; competency number 30: "guiding students in the use of community agencies and services" and competency number 25: "developing a co-op work experience program."

Individual Proficiency Scores. To determine the extent adult vocational teachers needed to increase their proficiency in various competency areas an individual's acquired proficiency level was compared to the proficiency level that individual felt desirable for all adult vocational teachers to attain. Only individuals who rated themselves as having less proficiency in an area than they indicated adult vocational teachers should have, were considered to need increased proficiency.

Column two of Table B.1 found in Appendix B, presents the number of individuals in each region who needed increased proficiency in each competency area. The largest number of teachers needing to increase their proficiency in one particular competency area was 442. Ninety-seven percent of the adult vocational teachers in the Western region needed to increase their proficiency in competency number 31: "providing special instruction or assistance to disadvantaged or handicapped students." Column three of Table B.1 presents those percentages.

In each region the 34 competency areas were ranked according to the percentage of individuals needing increased proficiency. This ranking is found in column four of Table B.1. The competency showing the most need for improvement was competency number 31: "providing special instruction or assistance to disadvantaged or handicapped students." The competency area which adult vocational teachers appeared to need little improvement in, was number 29: "using counseling techniques to help students solve personal problems." The Western and Eastern regions ranked it of least priority; and the Central region ranked it twenty-first.

Column 5 of Table B.1 presents the number of proficiency units computed for each competency area. A proficiency unit was defined as the difference between the individual's perception of the desired level of proficiency needed by adult vocational teachers, and the individual's acquired level of proficiency, in a competency area. This difference score was computed by assigning a numerical value to each of the possible response categories: "no" = 1, "slight" - 2, "moderate" = 3, "considerable" = 4, and "complete" = 5. The difference was computed for every individual in each of the 34 competency areas. The number of proficiency units needed for all adult vocational teachers in each region were summed, to give a regional total for each competency area. The number of proficiency units ranged from 18 to 1219 with 160.52 being the average.

To determine the "average units per person," the regional total of proficiency units was divided by the total number of teachers in that

region needing to increase their proficiency in each competency area. The average number of units per person ranged from 1.15 to 2.76 with the mean being 1.32. Column six of Table B.1 presents those findings.

Competencies Ranked in Order of Need to Increase Proficiency. Tables 4.11, 12, and 13 show the 34 competency areas ranked by the percentage of adult vocational teachers needing increased proficiency. Table 4.11 presents the competencies as ranked by adult vocational teachers in the Western region. Adult vocational teachers in the Western region needed to increase their proficiency most in competency area number 31: "providing special instruction or assistance to disadvantaged or handicapped students." "Utilizing an advisory committee to determine student and community needs ranked second in priority, competency number 1. Competencies that commonly dealt with in traditional methods courses (numbers 10, 12, 16 and 24) ranked in the lower priority levels. The lowest ranking competency areas dealth with counseling the student in personal problems; community agencies and services; and career orientation and job placement (competency numbers 27, 29 and 30).

Table 4.12 presents the competencies as ranked by adult vocational teachers in the Central region. Three of the first four ranked competencies implied teachers needed help in working with the special needs adult learner. Adult vocational teachers in the Central region needed to increase most of their skills in competency number 32: "providing special instruction or assistance to second language students"; while "providing special instruction or assistance to handicapped or disadvantaged students competency number 31 ranked second in priority. Competency numbers 27, 28, 29 and 30, dealing with counseling techniques were ranked throughout the distribution. Teachers in the Central region indicated less need for increasing proficiency in "maintaining student records," than any other competency.

Adult vocational teachers in the Eastern region ranked competency number 31, dealing with special needs students of highest priority. Competency number 32: "providing special instruction or assistance to second language students" was the competency area indicating the most need for improvement. Teachers in the Eastern region ranked counseling competencies (numbers 27, 29 and 30) of least priority, and traditional methods competencies were dispersed throughout the distribution. Table 4.13 presents those findings.

Chapter V

Discussion and Recommendations

Discussion

Part-time adult vocational teachers have been perceived as having special inservice needs because of the temporary nature of their position, their background and experiences, the scope and purposes of the programs they teach, and the diverse abilities, experiences and needs of the students they serve.

Table 4.11

Competency Areas Ranked According to the Needs of Teachers in the Western Region

Rank Order	Statement
1	Providing special instruction or assistance to disadvantaged or handicapped students
2	Utilizing an advisory committee to determine student and community needs
3	Developing a co-op work experience program
4	Implementing and supervising activities of student vocational organizations
5	Recognizing special characteristics of the adult learner
6	Revising courses in accordance with current occupational trends
7	Maintaining class interest to keep students in the program
8	Assessing program effectiveness
9	Relating instruction to the culturally different student
10	Assisting students in reading skills
11.5	Developing audio-visual materials
11.5	Assessing teacher effectiveness
13	Providing information on continuing education
14	Utilizing outside resource persons and services
15	Providing special instruction or assistance to second language students
16	Determining tools to measure student achievement
17	Mutual planning of individual programs with each student
18	Providing successful educational experiences for each student
19	Providing learning experiences for students with individual differences
20.5	Determining course outcomes
20.5	Developing group and individual learning activities to facilitate instruction
22	Selecting instructional materials
23	Developing a course of study
24	Analyzing student performance
25	Planning a unit of instruction from the course of study
26	Implementing the learning activities in the classroom
27	Maintaining occupational safety and health standards in the lab (or shop)
28	Using audio-visual equipment
29	Providing practical shop or laboratory demonstrations
30	Maintaining student records
31	Writing a lesson plan
32	Assisting students in career orientation and job placement
33	Guiding students in the use of community agencies and services
34	Using counseling techniques to help students solve personal problems

Table 4.12

Competency Areas Ranked According to the
Needs of Adult Vocational Teachers in the Central Region

Rank Order	Statement
1	Providing special instruction or assistance to second language students
2	Providing special instruction or assistance to disadvantaged or handicapped students
3	Assisting Students in Career Orientation and Job Placement
4	Relating Instruction to the Culturally Different Student
5	Utilizing an Advisory Committee to determine student and community needs
6	Recognizing special characteristics of the adult learner
7	Developing a co-op work experience program
8	Providing Information on Continuing Education
9	Implementing and Supervising activities of Student Vocational Organizations
10	Assessing Teacher Effectiveness
11	Utilizing outside resource persons and services
12	Providing Learning Experiences for Students with individual differences
13.5	Mutual planning of individual programs with each student
13.5	Providing successful educational experiences for each student
15	Assisting Students in Reading Skills
16	Determining Tools to measure student achievement
17.5	Revising courses in accordance with current occupational trends
17.5	Selecting Instructional Materials
19	Maintaining class interest to keep students in the program
20	Determining course outcomes
21	Using counseling techniques to help students solve personal problems
22	Assessing Program Effectiveness
23	Developing audio-visual materials
24	Developing group and individual learning activities to facilitate instruction
25	Analyzing Student Performance
26	Developing a course of study
27	Guiding Students in the use of community agencies and services
28	Planning a Unit of instruction from the course of study
29	Implementing Learning Activities in the Classroom
30	Providing practical shop or laboratory demonstrations
31	Maintaining Occupational safety and health standards in the lab
32	Using Audio Visual equipment
33	Writing a lesson plan
34	Maintaining Student Records

Table 4.13

Competency Areas Ranked According to the
Needs of Adult Vocational Teachers in the Eastern Region

Rank Order	Statement
1	Providing special instruction or assistance to second language students
2	Providing special instruction or assistance to disadvantaged or handicapped students
3	Utilizing an advisory committee to determine student and community needs
4	Recognizing special characteristics of the adult learner
5	Implementing and supervising activities of student vocational organizations
6	Developing a co-op work experience program
7	Utilizing outside resource persons and services
8	Developing audio-visual materials
9	Relating instruction to the culturally different student
10	Maintaining class interest to keep students in the program
11.5	Assisting students in reading skills
11.5	Assessing program effectiveness
13	Assessing teacher effectiveness
14	Providing learning experiences for students with individual differences
15	Determining course outcomes
16	Determining tools to measure student achievement
17	Providing information on continuing education
18	Mutual planning of individual programs with each student
19	Providing successful educational experiences for each student
20	Revising courses in accordance with current occupational trends
21	Using audio-visual equipment
22	Developing group and individual learning activities to facilitate instruction
23	Selecting instructional materials
24	Maintaining occupational safety and health standards in the lab or shop
25	Planning a unit of instruction from the course of study
26	Developing a course of study
27	Analyzing student performance
28	Maintaining student records
29	Implementing the learning activities in the classroom
30	Providing practical shop or laboratory demonstrations
31	Writing a lesson plan
32	Assisting students in career orientation and job placement
33	Guiding students in the use of community agencies and services
34	Using counseling techniques to help students solve personal problems

Related studies have used a competency assessment approach to determine the needs of adult vocational and adult-vocational teachers who teach specific subject matter areas. Although the number of competencies varied from study to study, several general competency areas were common to all: program planning, development and evaluation; curriculum development, guidance, classroom management, and providing instruction to special groups.

Competencies selected for use in other studies as well as contemporary trends and issues in adult vocational education were examined. A survey instrument was then designed to examine in detail part-time adult vocational teachers perceived inservice needs. Responses were grouped by vocational regions in Pennsylvania. The findings of this study were presented by region in order to facilitate teacher education institutions, in providing pre- and inservice activities closely related to the needs of the teachers in the regions they serve.

In most every competency area, adult vocational teachers rated their acquired proficiency level lower than the level desired for adult vocational teachers in general. A comparison of the mean desired and mean acquired proficiency scores of adult vocational teachers in general with those in particular employment categories, yielded four general findings:

1. the mean desired proficiency scores of full-time adult vocational teachers were most frequently higher than the mean desired proficiency scores for all adult vocational teachers;

2. the mean acquired proficiency scores of full-time adult vocational teachers were most frequently higher than the mean acquired proficiency scores for all adult vocational teachers;

3. the mean desired proficiency scores of part-time adult vocational teachers/working outside the field of education full-time, were most frequently lower than the mean desired proficiency scores of all adult vocational teachers; and

4. the mean acquired proficiency scores of part-time adult vocational teachers/working outside the field of education full-time, were most frequently lower than the mean desired proficiency scores of all adult vocational teachers.

The competency areas identified as major elements of concern by part-time vocational teachers in Pennsylvania were:

1. providing special instruction or assistance to disadvantaged or handicapped students,

2. providing special instruction or assistance to second language students,

3. utilizing an advisory committee to determine student and community needs,

4. implementing and supervising activities of student vocational organizations, and

5. recognizing special characteristics of the adult learner.

Recommendations

Based on the findings of this study and those reviewed it is recommended that:

1. comprehensive vocational teacher education programs in Pennsylvania include full-time faculty with professional preparation in Adult Education,

2. inservice activities for part-time adult vocational teachers be provided on a continuous basis,

3. part-time adult vocational teachers by recruited into professional preparation programs,

4. inservice activities for adult vocational teachers be implemented as a comprehensive program for all vocational categories,

5. the delivery of inservice activities be conducted at times and locations most convenient for the part-time adult vocational teachers,

6. the inservice activities be available for both undergraduate and graduate college credit, and

7. certification standards be developed and implemented for the improvement of adult vocational programming in Pennsylvania.

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APPENDIX A

PART II: Competencies of Adult Vocational Instructors

PART II: Competencies of Adult Vocational Instructors

The purpose of this part of the questionnaire is to identify competency areas of special significance to adult vocational instructors. Responses will aid in planning future in-service programs.

You are to make two responses to each item. In Column A indicate the level of proficiency you feel is necessary to adult vocational teachers in general. In column B, indicate your present proficiency in each of the competency areas.

Do not take too much time in thinking about any particular item. Please do not leave out any item--there are no right or wrong answers. We are primarily concerned with how you feel about the competencies needed by adult vocational instructors.

EXAMPLE:

	Column A: What proficiency must adult vocational teachers have in:					Column B: What is your present proficiency in:				
	NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE	NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE
Interpreting the innovative provisions of the Vocational Act as amended in 1968				X				X		

The person marking considerable in Column A has indicated that adult vocational instructors need a considerable proficiency in interpreting the innovative provisions of the amended vocational act of 1968. In column B, the indication is that this person has a moderate level of proficiency in this area.

Column A: What proficiency must adult vocational teachers have in:	NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE	Column B: What is your present proficiency in:	NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE
Utilizing an advisory committee to determine student and community needs											
Determining course outcomes											
Developing a course of study											
Revising courses in accordance with current occupational trends											
Planning a unit of instruction from the course of study											
Developing group and individual learning activities to facilitate instruction											
Mutual planning of individual programs with each student											
Selecting instructional materials											
Developing audio-visual materials											
Writing a lesson plan											
Implementing the learning activities in the classroom											
Using audio-visual equipment											
Assisting students in reading skills											
Providing learning experiences for students with individual differences											

Column A: What proficiency must adult vocational teachers have in:						Column B: What is your present proficiency in.					
	NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE		NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE
Relating instruction to the culturally different student											
Providing practical shop or laboratory demonstrations											
Providing successful educational experiences for each student											
Utilizing outside resource persons and services											
Maintaining occupational safety and health standards in the lab (or shop)											
Analyzing student performance											
Determining tools to measure student achievement											
Assessing teacher effectiveness											
Assessing program effectiveness											
Maintaining student records											
Developing a co-op work experience program											
Implementing and supervising activities of student vocational organizations											
Assisting students in career orientation and job placement											

Column A What proficiency must adult vocational teachers have in:							Column B What is your present proficiency in:					
	NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE		NO	SLIGHT	MODERATE	CONSIDERABLE	COMPLETE	
						Providing information on continuing education						
						Using counseling techniques to help students solve personal problems						
						Guiding students in the use of community agencies and services						
						Providing special instruction or assistance to disadvantaged or handicapped students						
						Providing special instruction or assistance to second language students						
						Recognizing special characteristics of the adult learner						
						Maintaining class interest to keep students in the program						

APPENDIX B

Adult Vocational Teachers' Status in 34 Competence Areas

Table B.1

Adult Vocational Teachers' Status in 34 Competency Areas

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Assisting students in reading skills	Western	461	184	39.9	10.0	268	1.46
	Central	399	179	44.9	15.0	261	1.5
	Eastern	459	171	37.3	11.5	297	1.74
Providing learning experiences for students with individual differences	Western	462	159	34.4	19.0	206	1.30
	Central	401	184	45.9	12.0	241	1.30
	Eastern	462	165	35.7	14.0	225	1.36
Relating instruction to the culturally different student	Western	451	182	40.4	9.0	247	1.36
	Central	399	208	52.1	4.0	283	1.40
	Eastern	455	177	38.9	9.0	229	1.29
Utilizing an advisory committee to determine student and community needs	Western	453	221	48.8	2.0	298	1.35
	Central	399	208	52.1	5.0	310	1.50
	Eastern	457	197	43.1	3.0	293	1.49

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Determining course outcomes	Western	458	151	32.9	20.5	180	1.19
	Central	392	164	41.8	20.0	200	1.20
	Eastern	452	157	34.7	15.0	180	1.15
Developing a course of study	Western	459	147	32.0	23.0	182	1.24
	Central	394	148	37.6	26.0	188	1.30
	Eastern	457	127	27.8	26.0	161	1.27
Revising courses in accordance with current occupational trends	Western	458	194	42.4	6.0	265	1.37
	Central	399	173	43.4	17.5	223	1.30
	Eastern	457	147	32.1	20.0	198	1.35
Planning a unit of instruction from the course of study	Western	456	139	30.5	25.0	168	1.21
	Central	401	145	36.2	28.0	172	1.20
	Eastern	456	128	28.0	25.0	159	1.24

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Developing group and individual learning activities to facilitate instruction	Western	459	151	32.9	20.5	183	1.21
	Central	398	160	40.2	24.0	192	1.21
	Eastern	458	141	30.8	22.0	179	1.27
Mutual planning of individual programs with each student	Western	460	165	35.9	17.0	213	1.29
	Central	396	180	45.5	13.5	233	1.31
	Eastern	461	152	33.0	18.0	194	1.28
Selecting instructional materials	Western	458	148	32.3	22.0	195	1.31
	Central	398	169	42.5	17.5	202	1.20
	Eastern	458	138	30.1	23.0	188	1.36
Developing audio-visual materials	Western	457	179	39.2	11.5	290	1.62
	Central	398	163	41.0	23.0	238	1.5
	Eastern	454	181	39.9	8.0	265	1.46

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Writing a lesson plan	Western	458	120	26.2	31.0	142	1.20
	Central	401	120	30.0	33.0	167	1.40
	Eastern	453	106	23.3	31.0	142	1.34
Implementing the learning activities in the classroom	Western	457	139	30.4	26.0	162	1.17
	Central	396	140	35.3	29.0	175	1.30
	Eastern	455	113	24.8	29.0	140	1.24
Using audio-visual equipment	Western	459	137	29.8	28.0	193	1.41
	Central	399	134	33.6	32.0	181	1.41
	Eastern	459	144	31.3	21.0	218	1.51
Providing practical shop or laboratory demonstrations	Western	456	126	27.6	29.0	162	1.29
	Central	402	137	34.1	30.0	174	1.30
	Eastern	457	107	23.4	30.0	136	1.27

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Providing successful educational experiences for each student	Western	451	160	35.5	18.0	190	1.19
	Central	401	181	45.1	13.5	218	1.20
	Eastern	458	149	32.5	19.0	186	1.25
Utilizing outside resource persons and services	Western	454	173	38.1	14.0	230	1.33
	Central	401	187	46.6	11.0	244	1.30
	Eastern	457	184	40.3	7.0	234	1.27
Maintaining occupational safety and health standards in the lab (or shop)	Western	452	136	30.0	27.0	193	1.42
	Central	401	136	33.9	31.0	188	1.41
	Eastern	460	130	28.3	24.0	173	1.33
Analyzing student performance	Western	451	141	31.3	24.0	173	1.23
	Central	401	157	39.1	25.0	186	1.20
	Eastern	462	125	27.1	27.0	159	1.27

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Determining tools to measure student achievement	Western	450	165	36.7	16.0	217	1.32
	Central	399	176	44.1	16.0	217	1.20
	Eastern	456	157	34.4	16.0	196	1.25
Assessing teacher effectiveness	Western	451	177	39.2	11.5	227	1.28
	Central	399	190	47.6	10.0	228	1.20
	Eastern	455	166	36.5	13.0	207	1.25
Assessing program effectiveness	Western	448	182	40.6	8.0	247	1.36
	Central	282	116	41.1	22.0	140	1.20
	Eastern	451	168	37.3	11.5	211	1.25
Maintaining student records	Western	449	122	27.1	30.0	163	1.34
	Central	281	83	29.4	34.0	104	1.30
	Eastern	454	117	25.8	28.0	162	1.38

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Developing a co-op work experience program	Western	446	208	46.6	3.0	315	1.51
	Central	397	202	50.8	7.0	329	1.60
	Eastern	453	186	41.1	6.0	278	1.49
Implementing and supervising activities of student vocational organizations	Western	449	206	45.9	4.0	345	1.67
	Central	395	199	50.4	9.0	311	1.6
	Eastern	453	190	41.9	5.0	286	1.51
Assisting students in career orientation and job placement	Western	454	87	19.2	32.0	118	1.36
	Central	397	214	53.9	3.0	339	1.60
	Eastern	463	90	19.4	32.0	119	1.32
Providing information on continuing education	Western	445	173	38.9	13.0	211	1.22
	Central	402	203	50.5	8.0	272	1.30
	Eastern	456	152	33.3	17.0	224	1.47

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Using counseling techniques to help students solve personal problems	Western	449	14	3.1	34.0	18	1.29
	Central	401	166	41.4	21.0	259	1.6
	Eastern	480	16	3.3	34.0	20	1.25
Guiding students in the use of community agencies and services	Western	454	22	4.8	33.0	29	1.32
	Central	401	150	37.4	27.0	284	1.9
	Eastern	466	33	7.1	33.0	42	1.27
Providing special instruction or assistance to disadvantaged or handicapped students	Western	455	442	97.1	1.0	1219	2.76
	Central	400	219	54.8	2.0	365	1.7
	Eastern	459	235	51.2	2.0	374	1.59
Providing special instruction or assistance to second language students	Western	408	153	37.5	15.0	323	2.11
	Central	398	251	63.1	1.0	413	1.6
	Eastern	459	241	52.5	1.0	390	1.61

Appendix B (Cont'd)

		N	Number Needing Increased Proficiency	Percent of Total	Rank	Proficiency Units	Average Units Per Person
Recognizing special characteristics of the adult learner	Western	454	197	43.4	5.0	339	1.72
	Central	402	206	51.2	6.0	288	1.4
	Eastern	461	197	42.5	4.0	294	1.5
Maintaining class interest to keep students in the program	Western	457	193	42.2	7.0	276	1.43
	Central	402	171	42.5	19.0	215	1.3
	Eastern	464	174	37.5	10.0	238	1.37

N = total responses to item
Number needing increased proficiency = the number of persons indicating a need to increase their proficiency in the skill area
Percent of Total = N ÷ Number needing increased proficiency
Rank = according to percent of total
Proficiency units = f x (desired proficiency - present proficiency)
Average units per person = Proficiency Units ÷ Number needing increased proficiency